



Climate change and health in the urban environment: Adaptation opportunities in Australian cities

Author(s): Bambrick HJ, Capon AG, Barnett GB, Beaty RM, Burton AJ
Year: 2011
Journal: Asia-Pacific Journal of Public Health / Asia-Pacific Academic Consortium for Public Health. 23 (2 Suppl): 67S-79

Abstract:

Urban populations are growing rapidly throughout the Asia-Pacific region. Cities are vulnerable to the health impacts of climate change because of their concentration of people and infrastructure, the physical (geographical, material, and structural) attributes of the built environment, and the ecological interdependence with the urban ecosystem. Australia is one of the most highly urbanized countries in the region and its already variable climate is set to become hotter and drier with climate change. Climate change in Australia is expected to increase morbidity and mortality from thermal stress, bacterial gastroenteritis, vector-borne disease, air pollution, flooding, and bushfires. The cost and availability of fresh water, food, and energy will also likely be affected. The more vulnerable urban populations, including the elderly, socioeconomically disadvantaged groups, and those with underlying chronic disease, will be most affected. Adaptation strategies need to address this underlying burden of disease and inequity as well as implement broad structural changes to building codes and urban design, and infrastructure capacity. In doing so, cities provide opportunities to realize "co-benefits" for health (eg, from increased levels of physical activity and improved air quality). With evidence that climate change is underway, the need for cities to be a focus in the development of climate adaptation strategies is becoming more urgent.

Source: <http://dx.doi.org/10.1177/1010539510391774>

Resource Description

Early Warning System:

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

Exposure :

weather or climate related pathway by which climate change affects health

Air Pollution, Ecosystem Changes, Extreme Weather Event, Temperature

Air Pollution: Ozone, Particulate Matter

Extreme Weather Event: Hurricanes/Cyclones, Wildfires

Climate Change and Human Health Literature Portal

Temperature: Fluctuations

Geographic Feature: 

resource focuses on specific type of geography

Urban

Geographic Location: 

resource focuses on specific location

Non-United States

Non-United States: Australasia

Health Co-Benefit/Co-Harm (Adaption/Mitigation): 

specification of beneficial or harmful impacts to health resulting from efforts to reduce or cope with greenhouse gases

A focus of content

Health Impact: 

specification of health effect or disease related to climate change exposure

Diabetes/Obesity, Infectious Disease, Morbidity/Mortality

Infectious Disease: Foodborne/Waterborne Disease, Vectorborne Disease

Foodborne/Waterborne Disease: General Foodborne/Waterborne Disease, Salmonellosis

Vectorborne Disease: General Vectorborne

Intervention: 

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Mitigation/Adaptation: 

mitigation or adaptation strategy is a focus of resource

Adaptation, Mitigation

Population of Concern: A focus of content

Population of Concern: 

populations at particular risk or vulnerability to climate change impacts

Elderly, Low Socioeconomic Status

Resource Type: 

format or standard characteristic of resource

Review

Resilience: 



capacity of an individual, community, or institution to dynamically and effectively respond or adapt to shifting climate impact circumstances while continuing to function

A focus of content

Timescale:

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment:

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content